

4. (Amended) A nucleotide sequence which codes for [a] the protein according to claim 1.
5. (Amended) An RNA sequence [according to claim 4] that encodes the protein of claim 1.
6. (Amended) A DNA sequence [according to claim 4] that encodes the protein of claim 1.
7. An expression cassette containing the DNA sequence of claim 6 operably linked to plant regulatory sequences which cause the expression of the DNA sequence in plant cells.
8. (Amended) A bacterial transformation vector comprising [an] the expression cassette according to claim 7, operably linked to bacterial expression regulatory sequences which cause replication of the expression cassette in bacterial cells.
9. (Amended) Bacterial cells containing as a foreign plasmid at least one copy of [a] the bacterial transformation vector according to claim 8.
10. Transformed plant cells containing at least one copy of the expression cassette of claim 7.
11. (Amended) [Transformed] The transformed cells according to claim 10, further characterized in being cells of a monocotyledonous species.

12. (Amended) [Transformed] The transformed cells according to claim 11, further characterized in being maize, sorghum, wheat or rice cells.
13. (Amended) [Transformed] The transformed cells according to claim 10, further characterized in being cells of a dicotyledonous species.
14. (Amended) [Transformed] The transformed cells according to claim 13, further characterized in being soybean, alfalfa, rapeseed, sunflower, tobacco or tomato cells.
15. (Amended) [A maize cell or tissue culture comprising] The transformed cells of [according to] claim 11 [12] wherein the cells are maize cells.
16. A transformed plant comprising transformed cells according to claim 10.
17. (Twice Amended) A method for killing and inhibiting plant pathogenic microorganisms which are susceptible to α -Hordothionin, [comprising] wherein the method comprises introducing into the environment of the pathogenic microorganisms an antimicrobial amount of [a] the protein according to claim 1.
18. (Amended) A method for killing and inhibiting plant pathogens selected from the group consisting of: *Fusarium graminearum*, *Fusarium moniliforme*, *Diplodia maydis*, *Colletotrichum graminicola*, *Verticillium alboatrum*, *Phytophthora megaspermae* f.sp. *glycinea*, *Macrophomina phaseolina*, *Diaporthe phaseolorum caulivora*, *Sclerotinia sclerotiorum*, *Sclerotinia trifoliorum*, and *Aspergillus flavus*, wherein the method comprises [comprising] introducing into the environment of the pathogenic

microorganisms an antimicrobial amount of [a] the protein according to claim 1.

19. (Amended) A method according to claim 17, wherein the environment of the pathogen is the tissues of a living plant.
20. (Amended) A method for enhancing the lysine content of a plant cell or seed, wherein the method comprises: a) transforming a plant cell by insertion of the expression cassette of claim 6; and b) [comprising] the step of causing the [a] protein according to claim 1 to be expressed in the cell or seed.
21. (Amended) A method for enhancing the lysine content of a plant, wherein the method comprises : a) transforming a plant cell by insertion of the expression cassette of claim 6; and b) [comprising] the step of causing the [a] protein according to claim 1 to be expressed in tissues of the plant.